

CLAIMS

1. A multi-band antenna comprising:
a first antenna portion extending generally in a first plane;
a second antenna portion, extending generally in a second plane; and
a hinged coupling providing coupling between said first antenna portion and said second antenna portion and permitting said second antenna portion to be folded over said first antenna portion such that said first plane and said second plane lie generally parallel.
2. A multi-band antenna according to claim 1 and wherein said coupling comprises at least one of galvanic coupling and capacitive coupling.
3. A multi-band antenna according to either of claims 1 and 2 and wherein said first antenna portion comprises a strip line antenna.
4. A multi-band antenna according to any of the preceding claims and wherein said second antenna portion comprises a wire bent in a generally rectangular shape whose dimensions exceed the dimensions of said first antenna portion.
5. A multi-band antenna according to any of the preceding claims and wherein said second antenna portion is curved with respect to said second plane.
6. A multi-band antenna according to claim 5 and wherein said second antenna portion includes a curved portion having a curvature diameter which is less than or equal to twice the diameter of said second antenna portion.
7. A multi-band antenna according to any of the preceding claims and wherein said multi-band antenna comprises a dual-band antenna, wherein said first antenna portion operates in a high frequency band and said second antenna portion operates in a low frequency band, when coupled to said first antenna portion.

8. A multi-band antenna according to claim 4, and wherein said wire comprises a first end and a second end, which are arranged generally in a mutually spaced parallel orientation.
9. A multi-band antenna according to claim 8 and wherein said multi-band antenna comprises a tri-band antenna.
10. A multi-band antenna according to any of the preceding claims and also comprising a pivotable antenna connector coupled to said first antenna portion.
11. A multi-band antenna according to claim 10 and wherein said pivotable antenna connector is coupled to said first antenna portion by at least one of galvanic coupling and capacitive coupling.
12. A multi-band antenna according to any of the preceding claims and being pivotably coupled to a communicating device, whereby said first antenna portion is pivotably coupled to said communicating device about a first axis and said second antenna portion is pivotably coupled to said first antenna portion about a second axis extending perpendicular to said first axis.
13. A multi-band antenna according to claim 12 and wherein when said second antenna portion is folded over said first antenna portion and said first antenna portion lies generally parallel to a side edge of said communicating device, said multi-band antenna has a width which does not exceed a width of said communicating device.
14. A multi-band antenna according to any of the preceding claims and also comprising a third antenna portion coupled to said second antenna portion.
15. A multi-band antenna according to claim 14 and wherein said third antenna portion is coupled to said second antenna portion by at least one of galvanic coupling and capacitive coupling.

16. A multi-band antenna according to either of claims 14 and 15 and also comprising a hinged coupling providing coupling between said second antenna portion and said third antenna portion and permitting said third antenna portion to be folded over said second antenna portion.

17. A multi-band antenna according to claim 16 and wherein said hinged coupling provides at least one of galvanic coupling and capacitive coupling.

18. A multi-band antenna according to any of claims 14 to 17 and wherein said multi-band antenna comprises a quadri-band antenna.

19. A multi-band antenna according to any of claims 14 to 18 and wherein said multi-band antenna is operative to operate in at least one low frequency band, which is suitable for reception of television broadcasts.

20. A multi-band antenna according to any of claims 14 to 19 and wherein said multi-band antenna is operative to employ second order harmonics thereby to operate in another band.

21. A multi-band antenna according to any of the preceding claims and also comprising at least one electrical component operative to provide impedance matching.

22. A multi-band antenna according to claim 21 and wherein said at least one electrical component comprises at least one of an inductor and a capacitor.

23. A multi-band antenna according to any of the preceding claims and also comprising a housing element formed around said first antenna portion.

24. A multi-band antenna according to claim 23 and wherein said housing element is molded around said first antenna portion.

25. A multi-band antenna according to any of the preceding claims and also comprising a support element operative to support said second antenna portion.